

August 12, 2014

Shimon Mizrahi Rainier Commons LLC 918 S. Horton Street, Suite 1018 Seattle, WA 98134

MANAGEMENT | TRAINING | LAB SERVICES

WWW.NVLLABS.com

Subject: Catch Basin Sampling for IPWP1- During Work

Aqueous and Sediment Sampling

Rainier Commons, LLC

Site Address: 3100 Airport Way S, Seattle, WA

NVL Project#: 2012-494

Dear Mr. Mizrahi:

Rainier Commons, LLC retained NVL Laboratories to conduct the sampling at their Old Rainier Brewery site located at 3100 Airport Way South, Seattle, Washington and this letter has been prepared to convey the results.

NVL Labs conducted the during-work round of sampling on July 1st, 2014. The samples were collected at roughly 1:00 PM. No precipitation had occurred that day (http://www.nws.noaa.gov). NVL Labs proceeded to open and inspect the catch basins referred to as CB1 and CB3 as well as the manhole referred to as MH6 on the attached figure (attachment A). These stormwater collection points are located west of building 13, where the work associated with the IPWP was in progress.

At the time of the sampling, following removal of the storm drain grates, CB1 was found to be dry with no stormwater present, but with adequate sediment present. Both water and sediment adequate for sampling were present in CB3. MH6 was found to have neither water nor sediment adequate for sampling. Accordingly, a sediment sample was collected from CB1, both sediment and aqueous samples were collected from CB3, and no samples were collected from MH6. Photos of the exposed catch basins and manhole were taken to document their condition. (See Attachment B)

Sampling Location	Stormwater Present?	Aqueous Sample Collected?	Sediment Present?	Sediment Sample Collected?	
Catch Basin 1	No	No	Yes	Yes	
Catch Basin 3	Yes	Yes	Yes	Yes	
Man Hole 6	No	No	No	No	

Samples were collected as per the Condition 6: Catch Basin Sampling Plan for IPWP1.

The samples were transported to Fremont Analytical Laboratories under a chain-of-custody protocol before being analyzed for PCBs by EPA Method 8082. Additionally, the sediment samples were also analyzed for the presence of the metals contained in the blasting media being utilized for the abatement work; Chromium (Cr), Copper (Cu), Nickel (Ni), and Zinc (Zn).



Attached to this letter are a copy of the laboratory reports dated July 16th, 2014, and the site plan that shows the sample locations. (Attachments C and A)

Aqueous Sample Results:

Laboratory analysis of the aqueous sample CB3 did not detect PCB Arochlors in the aqueous sample. Therefore, there were no exceedances of the aqueous screening limit of 0.1 micrograms per liter (mg/L) for total PCB Arochlors.

Sampling Location	Aqueous PCB Screening Limit (Total Alochors)	Sample Result	Result Above Screening Limit?
Catch Basin 3	.1 mg/L	Non Detect	NO

Sediment Sample Results:

PCBs:

Laboratory analysis of the sediment samples from CB1 and CB3 found detectable levels of PCB Arochlors in the samples collected from both CB1 and CB3. Total PCB concentrations of 8.35 parts per million (ppm) were detected in the sample collected from CB1. Total PCB concentrations of 5.74 ppm were detected in the sample collected from CB3. Both of these sediment PCB concentrations are above the sediment screening limit of 1.0 ppm for total PCB Arochlors.

Sampling Location	Sediment PCB Screening Limit (Total Alochors)	Sample Result Total Alochors	Result Above Screening Limit?
Catch Basin 1	1.0 ppm	8.35 ppm	YES
Catch Basin 3	1.0 ppm	5.74 ppm	YES

The total PCB concentrations were consistent with or not notably higher in magnitude than the prework sampling round which showed concentrations of 9.88 ppm in CB1 and 4.33 ppm in CB3.



Metals:

Laboratory analysis of the sediment samples from CB1 and CB3 found detectable levels of metals in the samples collected from both CB1 and CB3.

Chromium (Cr)

Sampling Location	Sample Result
Catch Basin 1	109 ppm
Catch Basin 3	92.9 ppm

Copper (Cu)

Sampling Location	Sample Result
Catch Basin 1	181 ppm
Catch Basin 3	211 ppm

Nickel (Ni)

Sampling Location	Sample Result					
Catch Basin 1	62.4 ppm					
Catch Basin 3	70.3 ppm					

Zinc (Zn)

Sampling Location	Sample Result
Catch Basin 1	912 ppm
Catch Basin 3	1,330 ppm

Prepared By

Marcus Gladden Industrial Hygienist

NVL Laboratories

Reviewed By

Munaf Khan Project Manager

Laboratory Director / President

Attachments:

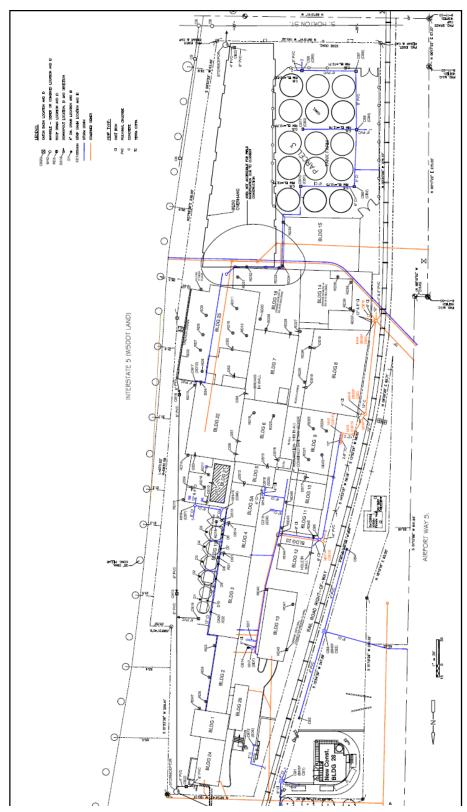
A: Site Map with Sample Locations

B: Site Observation Photos

C: Laboratory Testing Report, Fremont Analytical Labs Batch No. 1407073



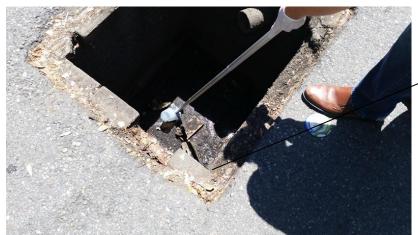
Attachment A: Site Map



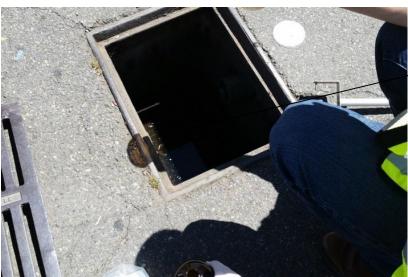
Stormwater and Sediment Sampling Rainier Commons, LLC Project No. 2012-494 August 12th, 2014



Attachment B: Site Observation Photos



Catch Basin 1 No standing water was observed in catch basin 1. A sediment sample was collected here.



Catch Basin 3
Standing water was observed in catch basin 3.



Man Hole 6

No standing water or significant accumulation of sediment was found in MH6 at the time of sampling.

Stormwater and Sediment Sampling Rainier Commons, LLC Project No. 2012-494 August 12th, 2014



Attachment C: Laboratory Testing Report, Fremont Analytical Labs Batch No. 1407073



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

NVL Labs, Inc. Munaf Khan 4708 Aurora Ave. N. Seattle, WA 98103

RE: Rainier Commons Lab ID: 1407073

July 16, 2014

Attention Munaf Khan:

Fremont Analytical, Inc. received 3 sample(s) on 7/8/2014 for the analyses presented in the following report.

Polychlorinated Biphenyls (PCB) by EPA 8082 Sample Moisture (Percent Moisture) Total Metals by EPA Method 6020

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

MGR

Michael Dee

Sr. Chemist / Principal

Date: 07/16/2014



CLIENT: NVL Labs, Inc. Work Order Sample Summary

Project: Rainier Commons Lab Order: 1407073

Date/Time Collected Lab Sample ID **Client Sample ID Date/Time Received** 1407073-001 7114-CB1-S 07/01/2014 12:00 PM 07/08/2014 4:07 PM 07/01/2014 12:00 PM 1407073-002 7114-CB3-S 07/08/2014 4:07 PM 1407073-003 7114-CB3-A 07/01/2014 12:00 PM 07/08/2014 4:07 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned



Case Narrative

WO#: **1407073**Date: **7/16/2014**

CLIENT: NVL Labs, Inc.

Project: Rainier Commons

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



Analytical Report

WO#: **1407073**Date Reported: **7/16/2014**

Client: NVL Labs, Inc. Collection Date: 7/1/2014 12:00:00 PM

Project: Rainier Commons

Lab ID: 1407073-001 **Matrix:** Soil

Client Sample ID: 7114-CB1-S

Analyses	Result RL Qual Unit		Units	DF	Date Analyzed	
Polychlorinated Biphenyls (P	CB) by EPA 8082	<u>2</u>		Batch	n ID:	8071 Analyst: DB
Aroclor 1016	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1221	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1232	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1242	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1248	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1254	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1260	8.35	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1262	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1268	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Total PCBs	8.35	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Surr: Decachlorobiphenyl	128	50.2-159		%REC	1	7/15/2014 7:00:00 PM
Surr: Tetrachloro-m-xylene	89.6	60.3-134		%REC	1	7/15/2014 7:00:00 PM
Total Metals by EPA Method	<u>6020</u>			Batch	n ID:	8053 Analyst: TN
Chromium	109	0.167		mg/Kg-dry	1	7/9/2014 5:17:02 PM
Copper	181	0.334		mg/Kg-dry	1	7/9/2014 5:17:02 PM
Nickel	62.4	0.167		mg/Kg-dry	1	7/9/2014 5:17:02 PM
Zinc	912	0.835		mg/Kg-dry	1	7/9/2014 5:17:02 PM
Sample Moisture (Percent Mo	oisture)			Batch	n ID:	R15475 Analyst: KZ
Percent Moisture	55.3			wt%	1	7/9/2014 8:51:37 AM

Qualifiers: B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

RL Reporting Limit

D Dilution was required

H Holding times for preparation or analysis exceeded

ND Not detected at the Reporting Limit



Analytical Report

WO#: **1407073**Date Reported: **7/16/2014**

Client: NVL Labs, Inc. Collection Date: 7/1/2014 12:00:00 PM

Project: Rainier Commons

Lab ID: 1407073-002 **Matrix:** Soil

Client Sample ID: 7114-CB3-S

Analyses	Result	Result RL Qual		Units	DF	Date Analyzed		
Polychlorinated Biphenyls (P	CB) by EPA 8082	<u>2</u>		Batch	ı ID:	8071 Analyst: DB		
Aroclor 1016	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM		
Aroclor 1221	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM		
Aroclor 1232	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM		
Aroclor 1242	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM		
Aroclor 1248	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM		
Aroclor 1254	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM		
Aroclor 1260	5.74	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM		
Aroclor 1262	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM		
Aroclor 1268	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM		
Total PCBs	5.74	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM		
Surr: Decachlorobiphenyl	106	50.2-159		%REC	1	7/15/2014 7:39:00 PM		
Surr: Tetrachloro-m-xylene	87.5	60.3-134		%REC	1	7/15/2014 7:39:00 PM		
Total Metals by EPA Method	6020			Batch	ı ID:	8053 Analyst: TN		
Chromium	92.9	0.264		mg/Kg-dry	1	7/9/2014 5:20:28 PM		
Copper	211	0.528		mg/Kg-dry	1	7/9/2014 5:20:28 PM		
Nickel	70.3	0.264		mg/Kg-dry	1	7/9/2014 5:20:28 PM		
Zinc	1,330	1.32		mg/Kg-dry	1	7/9/2014 5:20:28 PM		
Sample Moisture (Percent Mo	oisture)			Batch	ı ID:	R15475 Analyst: KZ		
Percent Moisture	71.5			wt%	1	7/9/2014 8:51:37 AM		

Qualifiers: B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

RL Reporting Limit

D Dilution was required

H Holding times for preparation or analysis exceeded

ND Not detected at the Reporting Limit



Analytical Report

WO#: **1407073**Date Reported: **7/16/2014**

Client: NVL Labs, Inc. Collection Date: 7/1/2014 12:00:00 PM

Project: Rainier Commons

Lab ID: 1407073-003 **Matrix**: Water

Client Sample ID: 7114-CB3-A

Analyses	Result RL Qual Units DF				Date Analyzed	
Polychlorinated Biphenyls (PC	CB) by EPA 808	<u>2</u>		Bato	h ID: 8079	Analyst: NG
Aroclor 1016	ND	0.222		μg/L	1	7/14/2014 10:49:00 AM
Aroclor 1221	ND	0.222		μg/L	1	7/14/2014 10:49:00 AM
Aroclor 1232	ND	0.222		μg/L	1	7/14/2014 10:49:00 AM
Aroclor 1242	ND	0.222		μg/L	1	7/14/2014 10:49:00 AM
Aroclor 1248	ND	0.222		μg/L	1	7/14/2014 10:49:00 AM
Aroclor 1254	ND	0.222		μg/L	1	7/14/2014 10:49:00 AM
Aroclor 1260	ND	0.222		μg/L	1	7/14/2014 10:49:00 AM
Aroclor 1262	ND	0.222		μg/L	1	7/14/2014 10:49:00 AM
Aroclor 1268	ND	0.222		μg/L	1	7/14/2014 10:49:00 AM
Total PCBs	ND	0.222		μg/L	1	7/14/2014 10:49:00 AM
Surr: Decachlorobiphenyl	95.1	45.1-140		%REC	1	7/14/2014 10:49:00 AM
Surr: Tetrachloro-m-xylene	59.0	42.1-101		%REC	1	7/14/2014 10:49:00 AM

Qualifiers: B Analyte detected in the associated Method Blank

E Value above quantitation range

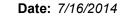
J Analyte detected below quantitation limits

RL Reporting Limit

D Dilution was required

H Holding times for preparation or analysis exceeded

ND Not detected at the Reporting Limit





Work Order: 1407073

QC SUMMARY REPORT

CLIENT: NVL Labs, Inc. Project: Rainier Commons

Total Metals by EPA Method 6020

Sample ID: MB-8053	SampType: MBLK	SampType: MBLK Units: mg/Kg			Prep Date: 7/8/2014			RunNo: 15			
Client ID: MBLKS	Batch ID: 8053					Analysis Da	te: 7/9/20 1	14	SeqNo: 313	3765	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.100									
Copper	ND	0.200									
Nickel	ND	0.100									
Zinc	ND	0.400									

Sample ID: LCS-8053	SampType: LCS		Units: mg/Kg F		Prep Date: 7/8/2014			RunNo: 15500			
Client ID: LCSS	Batch ID: 8053					Analysis Dat	SeqNo: 313766				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	75.6	0.100	62.90	0	120	67.9	132				
Copper	85.1	0.200	84.20	0	101	74	125.9				
Nickel	317	0.100	301.0	0	105	74.4	125.6				
Zinc	461	0.400	425.0	0	108	72.7	127.3				

Sample ID: 1407068-001ADUP	SampType: DUP			Units: mg/l	(g-dry	Prep Da	te: 7/8/201	4	RunNo: 158	500	
Client ID: BATCH	Batch ID: 8053					Analysis Da	te: 7/9/201	4	SeqNo: 313	3768	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	47.7	0.0839						50.71	6.21	30	
Copper	30.7	0.168						33.07	7.31	30	
Nickel	50.1	0.0839						51.45	2.75	30	
Zinc	65.8	0.336						68.61	4.20	30	

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

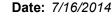
D Dilution was required

J Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit





Rainier Commons

Work Order: 1407073

Project:

QC SUMMARY REPORT

CLIENT: NVL Labs, Inc.

Total Metals by EPA Method 6020

Sample ID: 1407068-001AMS	SampType: MS			Units: mg/	Kg-dry	Prep Da	te: 7/8/201	4	RunNo: 158	500	
Client ID: BATCH	Batch ID: 8053					Analysis Da	te: 7/9/201	4	SeqNo: 313	3770	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	89.3	0.0833	41.64	50.71	92.7	75	125				
Copper	68.9	0.167	41.64	33.07	86.0	75	125				
Nickel	89.8	0.0833	41.64	51.45	92.2	75	125				
Zinc	104	0.333	41.64	68.61	85.6	75	125				

Sample ID: 1407068-001AMSD	SampType: MSD			Units: mg/	Kg-dry	Prep Dat	e: 7/8/201	4	RunNo: 155	500	
Client ID: BATCH	Batch ID: 8053					Analysis Dat	e: 7/9/201	4	SeqNo: 313	3771	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	93.4	0.0846	42.28	50.71	101	75	125	89.33	4.45	30	
Copper	68.3	0.169	42.28	33.07	83.4	75	125	68.90	0.808	30	
Nickel	90.7	0.0846	42.28	51.45	92.8	75	125	89.85	0.915	30	
Zinc	106	0.338	42.28	68.61	88.6	75	125	104.3	1.71	30	

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

D Dilution was required

J Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit

Date: 7/16/2014



Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

Work Order: 1407073

QC SUMMARY REPORT

CLIENT: NVL Labs, Inc.

Polychlorinated Biphenyls (PCB) by EPA 8082

Not detected at the Reporting Limit

Spike recovery outside accepted recovery limits

Sample ID: LCS-8071	SampType: LCS			Units: mg/Kg		Prep Date	: 7/9/2014		RunNo: 155	587	
Client ID: LCSS	Batch ID: 8071					Analysis Date	: 7/15/201	4	SeqNo: 315	5777	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	0.716	0.100	1.000	0	71.6	65.8	117				
Aroclor 1260	0.649	0.100	1.000	0	64.9	57	134				
Surr: Decachlorobiphenyl	46.0		50.00		92.1	50.2	159				
Surr: Tetrachloro-m-xylene	44.3		50.00		88.6	60.3	134				
Sample ID: 1407073-001ADUP	SampType: DUP			Units: mg/Kg-	dry	Prep Date	: 7/9/2014		RunNo: 155	587	
Client ID: 7114-CB1-S	Batch ID: 8071					Analysis Date	: 7/15/201	4	SeqNo: 315	5779	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.202						0		30	
Aroclor 1221	ND	0.202						0		30	
Aroclor 1232	ND	0.202						0		30	
Aroclor 1242	ND	0.202						0		30	
Aroclor 1248	ND	0.202						0		30	
Aroclor 1254	ND	0.202						0		30	
Aroclor 1260	7.66	0.202						8.347	8.54	30	
Aroclor 1262	ND	0.202						0		30	
Aroclor 1268	ND	0.202						0		30	
Total PCBs	7.66	0.202						8.347	8.54	30	
Surr: Decachlorobiphenyl	74.1		101.1		73.3	50.2	159		0		
Surr: Tetrachloro-m-xylene	83.1		101.1		82.2	60.3	134		0		
Sample ID: MB-8071	SampType: MBLK			Units: mg/Kg		Prep Date	: 7/9/2014		RunNo: 155	587	
Client ID: MBLKS	Batch ID: 8071					Analysis Date	: 7/15/201	4	SeqNo: 315	5783	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.100									
Aroclor 1221	ND	0.100									

Analyte detected below quantitation limits

Reporting Limit

Date: 7/16/2014



Work Order: 1407073

QC SUMMARY REPORT

CLIENT: NVL Labs, Inc. Project: Rainier Commons

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: MB-8071	SampType: MBLK			Units: mg/Kg		Prep Dat	e: 7/9/201	4	RunNo: 155	587	
Client ID: MBLKS	Batch ID: 8071					Analysis Dat	e: 7/15/20	14	SeqNo: 315	5783	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1232	ND	0.100									
Aroclor 1242	ND	0.100									
Aroclor 1248	ND	0.100									
Aroclor 1254	ND	0.100									
Aroclor 1260	ND	0.100									
Aroclor 1262	ND	0.100									
Aroclor 1268	ND	0.100									
Total PCBs	ND	0.100									
Surr: Decachlorobiphenyl	49.7		50.00		99.3	50.2	159				
Surr: Tetrachloro-m-xylene	46.1		50.00		92.2	60.3	134				

SampType: MS			Units: mg/k	(g-dry	Prep Da	te: 7/9/2014		RunNo: 158	587	
Batch ID: 8071					Analysis Da	te: 7/15/201 4	1	SeqNo: 315	5784	
Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit	Qual
4.27	0.307	3.072	0	139	61.7	139				
7.00	0.307	3.072	6.085	29.9	63.1	138				S
170		153.6		111	50.2	159				
146		153.6		95.1	60.3	134				
	Batch ID: 8071 Result 4.27 7.00 170	Batch ID: 8071 Result RL 4.27 0.307 7.00 0.307 170	Batch ID: 8071 Result RL SPK value 4.27 0.307 3.072 7.00 0.307 3.072 170 153.6	Batch ID: 8071 Result RL SPK value SPK Ref Val 4.27 0.307 3.072 0 7.00 0.307 3.072 6.085 170 153.6	Batch ID: 8071 Result RL SPK value SPK Ref Val %REC 4.27 0.307 3.072 0 139 7.00 0.307 3.072 6.085 29.9 170 153.6 111	Batch ID: 8071 Analysis Date	Batch ID: 8071 Analysis Date: 7/15/2014 Result RL SPK value SPK Ref Val %REC LowLimit HighLimit F 4.27 0.307 3.072 0 139 61.7 139 7.00 0.307 3.072 6.085 29.9 63.1 138 170 153.6 111 50.2 159	Batch ID: 8071 Analysis Date: 7/15/2014 Result RL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val 4.27 0.307 3.072 0 139 61.7 139 7.00 0.307 3.072 6.085 29.9 63.1 138 170 153.6 111 50.2 159	Batch ID: 8071 Analysis Date: 7/15/2014 SeqNo: 318 Result RL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD 4.27 0.307 3.072 0 139 61.7 139 7.00 0.307 3.072 6.085 29.9 63.1 138 170 153.6 111 50.2 159	Batch ID: 8071 Analysis Date: 7/15/201 ★ SeqNo: 315784 Result RL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit 4.27 0.307 3.072 0 139 61.7 139 138 138 138 170 153.6 111 50.2 159 159 159 159 159 159 159 159 159 159 159 159 159 159 159 159 159 150

NOTES:

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

D Dilution was required

J Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit

S - Spike recovery indicates a possible matrix effect. The method is in control as indicated by the Laboratory Control Sample (LCS).

Date: 7/16/2014



Rainier Commons

Work Order: 1407073

QC SUMMARY REPORT

CLIENT: NVL Labs, Inc. Project:

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: MB-8079	SampType: MBLK			Units: µg/L		Prep Dat	te: 7/10/20	14	RunNo: 15	574	
Client ID: MBLKW	Batch ID: 8079					Analysis Dat	te: 7/14/20	14	SeqNo: 31	5563	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.200									
Aroclor 1221	ND	0.200									
Aroclor 1232	ND	0.200									
Aroclor 1242	ND	0.200									
Aroclor 1248	ND	0.200									
Aroclor 1254	ND	0.200									
Aroclor 1260	ND	0.200									
Aroclor 1262	ND	0.200									
Aroclor 1268	ND	0.200									
Total PCBs	ND	0.200									
Surr: Decachlorobiphenyl	299		400.0		74.8	45.1	140				
Surr: Tetrachloro-m-xylene	145		400.0		36.2	42.1	101				S
NOTES:											

S - Surrogate outside recovery limits. Minimum method criterion of one surrogate within established recovery limits was met.

Sample ID: LCS-8079	SampType: LCS			Units: µg/L		Prep Da	te: 7/10/2 0)14	RunNo: 158	574	
Client ID: LCSW	Batch ID: 8079					Analysis Da	te: 7/14/20)14	SeqNo: 315	5564	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.36	0.200	2.000	0	67.8	41.4	118				
Aroclor 1260	1.54	0.200	2.000	0	77.0	56	119				
Surr: Decachlorobiphenyl	436		400.0		109	45.1	140				
Surr: Tetrachloro-m-xylene	228		400.0		57.0	42.1	101				

Qualifiers: Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

RPD outside accepted recovery limits

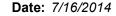
D Dilution was required

Analyte detected below quantitation limits

Reporting Limit

Ε Value above quantitation range

Not detected at the Reporting Limit





Work Order: 1407073

QC SUMMARY REPORT

CLIENT: NVL Labs, Inc. Project: Rainier Commons

Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID: 1407073-003AMS	SampType: MS			Units: µg/L		Prep Da	te: 7/10/20	14	RunNo: 158	574	
Client ID: 7114-CB3-A	Batch ID: 8079					Analysis Da	te: 7/14/20	14	SeqNo: 315	5567	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.59	0.222	2.222	0	71.7	45.5	118				
Aroclor 1260	1.73	0.222	2.222	0	78.1	50.8	129				
Surr: Decachlorobiphenyl	365		444.4		82.2	45.1	140				
Surr: Tetrachloro-m-xylene	248		444.4		55.9	42.1	101				

Sample ID: 1407096-001BDUP Client ID: BATCH	SampType: DUP Batch ID: 8079			Units: µg/L		Prep Da	te: 7/10/20 te: 7/14/20		RunNo: 158 SeqNo: 318		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.327						0		30	
Aroclor 1221	ND	0.327						0		30	
Aroclor 1232	ND	0.327						0		30	
Aroclor 1242	ND	0.327						0		30	
Aroclor 1248	ND	0.327						0		30	
Aroclor 1254	ND	0.327						0		30	
Aroclor 1260	ND	0.327						0		30	
Aroclor 1262	ND	0.327						0		30	
Aroclor 1268	ND	0.327						0		30	
Total PCBs	ND	0.327						0		30	
Surr: Decachlorobiphenyl	479		653.6		73.4	45.1	140		0		
Surr: Tetrachloro-m-xylene	335		653.6		51.3	42.1	101		0		

Qualifiers: B Analyte detected in the associated Method Blank

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

D Dilution was required

J Analyte detected below quantitation limits

RL Reporting Limit

E Value above quantitation range

ND Not detected at the Reporting Limit



Sample Log-In Check List

Client Name: N	VL	Work Order Numb	er: 1407073	
Logged by: C	lare Griggs	Date Received:	7/8/2014	4:07:00 PM
Chain of Custod	<u>ly</u>			
1. Is Chain of Cus	ody complete?	Yes 🗸	No \square	Not Present
2. How was the sa	mple delivered?	Client		
<u>Log In</u>				
3. Coolers are pres	sent?	Yes 🗸	No 🗌	NA \square
4. Shipping contain	ner/cooler in good condition?	Yes 🗹	No 🗆	
Custody seals ir	tact on shipping container/cooler?	Yes L	No 📙	Not Required 🗹
6. Was an attempt	made to cool the samples?	Yes 🗸	No 🗌	NA 🗌
7. Were all coolers	received at a temperature of >0°C to 10.0°C	Yes 🗹	No 🗌	NA 🗌
8. Sample(s) in pro	oper container(s)?	Yes 🗹	No 🗌	
9. Sufficient samp	e volume for indicated test(s)?	Yes 🗹	No 🗌	
10. Are samples pro	operly preserved?	Yes 🗹	No 🗌	
11. Was preservativ		Yes	No 🗸	NA \square
12. Is the headspace	e in the VOA vials?	Yes	No 🗌	NA 🗹
	containers arrive in good condition(unbroken)?	Yes 🗹	No 🗌	
14. Does paperwork	match bottle labels?	Yes 🗸	No 🗌	
15. Are matrices co	rectly identified on Chain of Custody?	Yes 🗹	No 🗌	
	nalyses were requested?	Yes 🗹	No 🗌	
	times able to be met?	Yes 🗹	No \square	
Special Handlin	g (if applicable)			
-	ed of all discrepancies with this order?	Yes	No 🗌	NA 🗹
Person No	tified: Date	e:		
By Whom:	Via:	eMail Ph	one Fax	☐ In Person
Regarding				
Client Inst	ructions:			

Item Information

Item #	Temp °C	Condition
Cooler	8.0	Good
Sample	13.5	

TAT-> Next Day 2 Day 3 Day (\$10)		11	ж					×
0:0		The state of the s	Pecelved		lime	Date/Time		Reinquisted
(6:07	Date Time 7/4/14/1	200	Received		Tale/Ime	- Daved	1	Relinguistigs
Special Remarks:		Disposed by Leb (Afee may be assessed if samples are retained after 30 days.)	may be assessed if sample	Disposel by Leb (Aree	П	Return to Clent	J	Sample Disposet:
	Ntrate+Ntrite	Ruoride Ntrati	O-Prosphate	Sulfate Bromide	Chloride S.	Ntrite): Nitrate	"Anions (Grde)
N Rasesn T T U V B	CO CO FO HE K ME MO MO NO	As Ba Ba Ga Cu Cu	Individual: Ag Al	illutants TAL	RURA-8 Prority Pollutants	MICAS RO	1	metaswayss(urde):
			L					10
								100
								- Co
					1			a o
WELL AS M.S. SPIKE			+		+			. 0
TOK SAMP					1			
Do Carre								*
COMPOSITE BOTH ROTTES	×			1,0	4	A	-882	3구114 -
	XXT			713		Ś	- CB3 - S	2714
	×			12:00 SIL	7/1/14 12	S	C84 - 9	5-187 - hit:
Comments/Depth			\$ 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sample Sample Type (Metrix)	Sample St Date 1		TO .	Sample Name
1NO: 2012-4914	LLABS-C	Bhail: MUNAF.K		Fax 206-634-1936	, and	VAF KHAN	Reports To (PM): MUNAF	Reports To
	BOOMS SU	Collected by:	26-547-0100	Tel: 26	48103	TLE, WAY	OP SEATTLE,	Oty, State, Zp
WAY S SOUTH WA 92134	report	Location		Z	AUKORA AUE	Ø	Eh-	Address
	RAWIED CHARMS	Project Name:			~	L (A85	NVL	Cient:
g.	Page:	18/14	Date 7/8		Tel: 205-352-3790 Fax: 206-352-7178	Tel:	ont Ave N. A 98103	Seattle, WA 98103
ADJAJA	Tables Designation of the second				Analytical	Au		
Claim of Custody Necold					remon	(P	7	
Train of O Istadia Domina	_							ボグイン